

WE CLAIM:

1. A light system having a plurality of lights having different light emission properties, each light having at least one hollow light guide with a cavity into which light from at least one lamp is directed and having at least one light output device for outputting light from the hollow light guide to a light exit face, the light output device comprising at least one light permeable element having a boundary surface between two media with a different refractive index, said boundary surface being provided with a light-refractive structure for deflecting light in at least one plane directed perpendicular to a light exit face so that the light intensity distribution curve of the light emerging at the light exit face is influenced in this plane, each light having a supporting structure on which at least one optically effective element for influencing the beam path of the light output by the lamp, each optically effective element being a prefabricated component having fixed dimensions so that the component can be installed as an optically effective element in each supporting structure of the lights of the system.

2. A light system according to claim 1, wherein each light has at least a cap reflector and an element of a light output device selected from a light-refractive structure and an input reflector, said cap reflector and the element are prefabricated components of a fixed dimension so that they can be attached and installed in each support structure.

3. A light system according to claim 2, wherein each light of the system has the same dimensions in the support structure for receiving the cap reflector and the element of the light output device.

4. A light system according to claim 1, which has at least one first light having an exclusive reflective cap reflector and at least one second light having a partially light-transmissive cap reflector for the output of indirect light parts, the light reflectors of the first light being of a standard dimension so that it can be used with the support structure of the second light and the cap reflector of the second light being of a standard dimension so that it can be used in the support structure of the first light.

5. A light system according to claim 1, which includes at least a first light with a cap reflector and a second light with a cap reflector, the cap reflectors of the first and second lights having different reflection properties and having standard dimensions so that they can be interchangeably used in the first and second lights.

6. A light system according to claim 1, which includes at least two different lights, each light having at least one planar element in the respective light output device having the light-refractive structure of said component part of the light output device, said parts being dimensioned so that they can be introduced in the support structure of each of the first and second lights, so that the planar elements of the first light comprise a different light-refractive structure than the planar elements of the second light.

7. A light system according to claim 6, wherein the planar elements of the first light comprise the same length and width as the planar elements of the second light.

8. A light system according to claim 1, wherein the input reflector of a first light is different from an input reflector of a second light, said input reflectors being dimensioned so that the input reflector of the first light and the input reflector of the second light are interchangeable.

9. A light system according to claim 8, wherein the input reflector of the first light completely reflects light into the hollow light guide and the input reflector of the second light directs part of the light to bypass the hollow light guide for output as an indirect light part.

10. A light system according to claim 1, wherein a plurality of the lights have the same support structure and differ on the basis of one or more optically effective components being secured to the support structure that have the same dimensions relative to the installation but exhibit different light-oriented properties.

11. A light system according to claim 1, wherein, for a group of lights, the light output face via which light is coupled out from the hollow light guide is different for at least two different lights of this group, and the light output device for at least a part of the lights of the group

comprises planar elements arranged side-by-side that are respectively provided with a light-refractive structure that deflects light in a direct fashion, and at least one planar element has the same basic shape and the same relevant dimensions for all lights of this group as a corresponding element of all other lights of the group.

12. A light system according to claim 11, wherein the planar element having the light-refractive structure of a light of the group has the same basic shape and the same dimensions as the elements with a light-refractive structure of a different light of the group.

13. A light system according to claim 11, wherein the planar elements are separated from one another and from the housing of the hollow light guide for a light of the system by a plurality of spacer elements, which have different dimensions.

14. A light system according to claim 1, wherein at least a part of the lights of the system have light output devices comprising at least one light-transmissive element having a boundary surface between two media with a different refractive index that is provided with a light-refracting structure that essentially prevents a light emission above a limited angle relative to the perpendicular vis a vis light exit face in at least one plane perpendicular to the light exit surface so that the shielding of light emerging at the light exit face is produced in this plane.

15. A light system according to claim 1, wherein the lights of at least part of the lights of the light system are arranged outside the hollow light guide and couple light into the hollow light guide from the outside.

16. A method for manufacturing a light having at least one hollow light guide into which light from at least one lamp is directed and at least one light output device for outputting light from the hollow light guide to a light exit face, wherein the light output device comprises at least one boundary surface between two media with a different refractive index that is provided with a light-refractive structure which deflects light in at least one plane directed perpendicular to the light exit face so that the light intensity distribution curve of the light emerging at the light exit face is influenced in this plane and the light comprises a supporting structure on which at least one optically

effective component that influences the beam path for the light output by the lamp is attached and that defines a specific area for the acceptance of the optically effective component parts, the method comprising the steps of providing at least one prefabricated optically effective component having a predetermined dimension, arranging the component so that the predetermined surface is completely filled with the component except for a region whose dimensions are smaller than the dimensions of the component, and fastening the component to the support structure in conformity with this arrangement.

17. A method according to claim 16, wherein the light output device has a light output surface via which light is coupled out of the hollow light guide and has a predetermined dimension, the method further including the steps of providing at least one light-transmissive plate having a light-refractive structure producing a shielding at the base area, arranging the at least one plate so that the predetermined area that corresponds to the light exit face is completely filled or filled except for a region whose dimensions are smaller than the dimensions of the plates, and fastening the plates in an opening of the housing of the hollow light waveguide in this arrangement so that these entirely or partially limit the cavity of the hollow light guide.

18. A method according to claim 17, which further includes, when forming the light output device, providing a plurality of plates having a light-refracting structure generating a shielding being arranged next to one another, at least two of said plates having the same shape and the same dimensions.